

5. The dates at which various insects are first seen.
6. The dates of the flowering of various plants.
7. The dates of the leafing and falling of the leaves of various trees and shrubs.
8. The dates of the breaking up and disappearance of the ice in rivers and lakes in spring, and of the freezing over of the same in the fall.

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RECENT LITERATURE.

Nelson's *Birds of Bering Sea and the Arctic Ocean*.*—The late Mr. G. R. Gray, who had a habit of literal exactitude in handling the names of birds, might have reaped a fine crop of new generic and specific terms from this treatise, in which many of the scientific designations are misprinted in bold-faced type, not all of these being accounted for in the list of errata which constitutes page 56 *e*. It is easy to see that a page of matter relating to the Spoon-billed Sandpiper divorces two species of *Actodromas* from the other two treated; but by the erratum leaf alone can we discover that the matter headed *Arquatella maritima* relates to a bird "lately described by Mr. Ridgway";

* Contained in: Cruise | of the | Revenue-steamer | Corwin | in | Alaska and the N. W. Arctic Ocean | in | 1881. | — | Notes and Memoranda: Medical and Anthropological; | Botanical; Ornithological. | — | Washington: | Government Printing Office. | 1883. 1 vol. 4to, pp. 1—56, 56 *a—f*, 57—120, with 12 pll. not numbered and some not lettered, and various woodcc. in text. The ornithological matter is half-titled | — | Birds of Bering Sea and the Arctic Ocean. | By | E. W. Nelson. | — | 55 | It occupies pp. 55, 56, 56*a—f*, 57—118, with 4 colored plates.

In mechanical execution this piece of book-making is a miraculous botch. One familiar with the possibilities of political printing has still something to learn from inspection of this realization. In the copy examined, for example, the title-page is upside down, and makes the fifth leaf of the book, preceded by a bastard title-page and two pages of text, likewise upside down, and faced by a plate of a fish which belongs to an ichthyological article at the end of the book—though no hint of ichthyology is given in the statement of 'Notes and memoranda' which the title duly sets forth, while the broken pagination and the entirely unnumbered and partly unlettered plates prepare us for the typographical eccentricities above noted.

i. e., to *A. couesi*. And so on. It is a pity that so valuable and interesting a treatise as this of Mr. Nelson's should not have been more carefully printed.

The author accompanied the 'Corwin' on her cruise in search of the 'Jeannette' during the latter part of the summer of 1881. We quote:—

"On June 21, we left Saint Michaels and crossed Bering Sea to Saint Lawrence Island and Plover Bay on the Siberian coast; thence along the coast and through the Straits and northwest in the Arctic to the vicinity of Nordenskiöld's winter quarters.... Thence we returned again to Saint Lawrence Island and to Saint Michaels. After remaining here a short time, we returned to the Arctic, touching at all the islands in Bering Straits; and during the remainder of the summer visited in succession the entire Alaskan coast-line from Bering Straits to Point Barrow, including Kotzebue Sound, and on the Siberian shore from the Straits to North Cape. We also cruised along the edge of the ice-pack, landing upon Herald and Wrangel Islands. On Sept. 14, we passed through Bering Straits bound south; and after remaining sometime at Ounalaska in the Aleutian Islands,.... we left, October 4, homeward bound.

"The observations upon which the present paper is based were made both during the cruise just detailed, and in addition are the results of observations made by myself during over four years' residence at Saint Michaels, and explorations carried on in various directions from that point. In addition, I have used information obtained from various reports which have been issued regarding the region in question....

"The species given for the Alaska coast and the islands of Bering Sea are almost, or quite, a complete list of the birds found there; but the species mentioned upon the Siberian coast form only a small quota of those occurring in that region."

After some pages concisely descriptive of the region and its avifauna, the author proceeds to treat, in more or less detail, no fewer than 192 species of birds, North American with few exceptions. The interesting notes are chiefly those of a field naturalist, the technicalities of the subject being at a minimum. The determination of the species, we presume, and the terminology employed, rest upon excellent authority.

The nearness of America to Asia in this latitude, the narrowness between meridians in Arctic regions, and the homogeneousness of circum-polar faunæ, all tend to blend the birds of the two continents. Forty miles of Arctic ocean is nothing in the distribution of birds, and in fact two faunæ inosculate here. This seems to be brought about in two ways, one of which is the actual interchange of types of birds characteristic of the 'Old' and 'New World' respectively. As our knowledge of the bird fauna of North Alaska has matured, we have lengthened our North American list of such types; and quite possibly, when the Siberian fauna is as well known, an Asiatic list may be the gainer by sundry acquisitions from our side. Among the Old World forms found in Alaska we may mention the following: *Phylloscopus borealis*, *Parus ciuctus*, *Budytes flavus*, *Anthus pratensis*, *Motacilla ocularis*, *Pyrrhula cassini*. All of these

oscine Passeres are treated by Mr. Nelson, excepting the last one. The *Parus* is rated as the var. *griseus* of Sharp and Dresser, said to be "the much grayer and somewhat larger Eastern Siberian form," occurring in Alaska. If this determination holds, "*Parus cinctus*" of the American list becomes *P. cinctus griseus*.* The *Motacilla ocularis*, well known from Plover Bay, Siberia, and lately found in California, is stated to have been observed by Mr. L. M. Turner in the spring of 1881 on Atkha, the western-most island of the Aleutian chain. The Asiatic *Lanius cristatus*, though not yet to be added to our fauna, comes near it, a specimen having been found at Wrangel Island. The Asiatic *Sylvia eversmanni* is in similar case, having been found by Mr. Nelson northeast of the Straits.

Among water birds, as might be expected, Alaska has thus far yielded a number of Old World forms. The Asiatic Golden Plover, *Charadrius fulvus* of authors, was recorded some years ago. Mr. Nelson now speaks of the Mongolian Plover, *Ægialites mongolicus*, saying that "there is a single record of this bird's occurrence in Alaska." "Two specimens were procured on Choris Peninsula, in Kotzebue sound, during the summer of 1849."† This bird has thus far escaped inclusion in the North American lists. The Sharp-tailed Sandpiper, *Actodromas acuminata*, an Asiatic species, is an interesting addition to our Fauna lately made by Mr. Nelson at Saint Michael's, Alaska, where it is said to be "abundant" during the autumn. Decidedly the most interesting of this group, the Spoon-billed Sandpiper, *Eurynorhynchus pygmaeus*, though only obtained by Mr. Nelson on the Siberian side, is now to be added unquestionably to the American list.‡ Of this extremely rare and curious bird, of which perhaps only about 30, mostly Indian, specimens are known to exist, Mr. Nelson was so fortunate as to secure a fine adult female, in breeding dress (June 26), making the second known in this plumage—that figured in the 'Ibis,' as below cited, having remained until now unique. As Mr. Harting has surmised, the breeding place of the species has proven to be the northeast Arctic shore of Asia, whence it is but a step to reach the opposite continent. Mr. Nelson gives a full description of the plumages, and also figures his beautiful specimen. Such other Asiatic species as the Pacific

* We have long had stereotyped in the plates of the new edition of the 'Key', under name of *Parus hudsonicus evura*, an Alaskan Tit, apparently before undescribed, resembling *P. hudsonicus*, but larger, with longer tail (nearly 3.00 inches) and apparently bearing the same relation to *hudsonicus* proper that *P. septentrionalis* does to *P. atricapillus*.

† See Harting, *Ibis*, 1870, p. 386; *P. Z. S.*, 1871, p. 111.

‡ It is recorded by Harting, *P. Z. S.*, 1871, pp. 111, 114, from Choris Peninsula, the specimen said to have been procured there in 1849, and figured in the *Ibis*, 1869, p. 426, Pl. XII, being supposed to be the only one known to exist in summer plumage. The species was lately noted by Ridgway as occurring at Point Barrow, in *Bull. U. S. Nat. Mus.*, No. 21, 1881, p. 85. Without reference to the earlier record here cited, we lately included it in our Check List, 1882, p. 136, with some hesitation, as we understood that the alleged Point Barrow occurrence was open to question. There seems, however, no reason to doubt the actual occurrence of the species on the American side, and it should take proper place now as a 'North American' bird.

Godwit, *Limosa uropygialis* of Gould, or *L. lapponica novæ-zealandiæ*, as Mr. Nelson gives it; the Wandering Tattler, *Heteroscelus incanous*; the Bristle-bellied Curlew, *Numenius taitiensis* (*N. femoralis* Peale), complete the list of Waders already known to reach our shores and included by Mr. Nelson in the present connection.

The other of the two methods, above alluded to, by which the Asiatic and the American faunæ come together is a curious one, if it can be fully substantiated. Though, as is well known, the *Eastern* North American fauna reaches the Pacific in the latitudes of Alaska, yet there seems to be in that region an approach of some American forms to the characters of their Asiatic or European conspecies. Perhaps the case could be more rigorously defined as the tendency to a single *circumpolar* type of conspecies which further south become better differentiated in any meridian: and very likely some forms now quoted as peculiarly Alaskan, in so far as North America is concerned, may prove characteristic rather of our whole Arctic coast. The case seems to be best marked among Birds of Prey. According to what we presume to be Mr. Ridgway's identifications, Mr. Nelson's article gives us, for example, as Alaskan, *Ulula cinerea* and *Ulula cinerea lapponica*; *Nyctale tengmalmi* and *Nyctale tengmalmi richardsoni*; *Surnia funerea* and *Surnia funerea ulula*; *Hierofalco gyrfalco candicans* and *Hierofalco gyrfalco sacer*; with two forms of Peregrines, *Falco peregrinus nævius*, and *F. peregrinus pealii*. Waiving what might be said against the distinctness of any or all of these related forms, and assuming subspecific characters to be established, have we in such cases as those of the three Owls the Old World forms actually reaching us from Asia? Or rather, have we not the American forms merging toward the pole into the common stock or stem of the species?

Excepting the three Owls mentioned, all the Alaskan Birds of Prey are noted by Mr. Nelson under the recognized names of supposed American forms, as *Pandion haliaëtus "carolinensis"*; *Archibuteo lagopus sancti-johannis*; *Aquila chrysaëtus "canadensis,"* etc. A *Bubo virginianus "subarcticus"* is given among the Owls which occasionally visit the coast of Bering Sea.

The case of the Ptarmigan, as presented by Mr. Nelson, can be understood only by reference to the erratum leaf. One is *Lagopus albus*. Two others (Nos. 78 and 79) are to be treated as one, both being headed "*Lagopus rupestris*, Rock Ptarmigan." Thirdly comes No. 80, a certain "*Lagopus rupestris occidentalis*, Turner. Atkhan Ptarmigan." This is the same bird as that recently published by Mr. L. M. Turner (Proc. U. S. Nat. Mus., 1883, p. —), under the name of *Lagopus mutus atkhensis*, from Atkha Island, and the name *Lagopus rupestris occidentalis* is corrected among the errata. Mr. Turner's later determination is to call the new Ptarmigan *Lagopus mutus atkhensis*. We may add, however, that we have ourselves no faith whatever in the validity of the distinctions sought to be established by Mr. Turner among the Ptarmigans of the *mutus* or *rupestris* type, and we base this view in the main upon Mr. Turner's own statement of the case. He may be quite right, however,

in reducing the North American *L. rupestris* to a subspecies of *L. mutus*. Mr. Nelson's fourth Ptarmigan is headed "*Lagopus alpinus*, Subalpine Ptarmigan," and is only reported as from Siberia, and upon Norden-skiöld's authority.

The Alaska Crane, noted as *Grus fraterculus* Cassin, is said to be extremely common on the coast of Norton Sound.

The Geese of the Canada Goose type are given as two, *Bernicla canadensis leucoparia* of Cassin, the smaller species, and *B. canadensis occidentalis* of Baird, a larger one from the west coast, noted by Baird in 1858, but overlooked for some years. We are inclined to endorse these determinations, some late examinations of our Geese having led us to believe that there are four recognizable though doubtless intergrading Geese of North America of the *canadensis* type—two larger and two smaller subspecies. The large *B. canadensis* proper has its western representative in *B. c. occidentalis*, as the small *B. c. hutchinsi* has its in *B. c. leucoparia*.* The "strange and handsome" Emperor Goose (*Philacte canagica*) is given as occurring "in thousands" from the Yukon to Cape Vancouver. The European Widgeon (*Mareca penelope*), is given upon H. W. Elliott's record; the American also occurs. Steller's Eider (*Polysticta stelleri*) is noted as widely distributed over the coasts of Bering Sea, and as "extremely numerous" along the Aleutian chain in winter. *Lampronetta fischeri*, the Spectacled Eider, is said to be common and in some places abundant along the Alaskan shore of Bering Sea as far north as Norton Sound. Other Eiders and three Scoters also occur; the Velvet Scoter is given as *Melanetta fusca*.

Among the northern Gulls, the Ivory Gull, *Pagophila eburnea*, seems to be absent from Bering Sea, though reported by Nordenskiöld from Northeast Siberia. The Kittiwakes are *Rissa brevirostris*, and *R. tridactyla kotzebuii*. There is in this group the same typographical or other confusion noted for "*Lagopus rupestris*"; for two Gulls, according to the errata to be treated as one, are separately headed "*Larus cachinnans*" Pall. One (No. 152) is, however, Englished as the "Siberian Herring Gull," the other (No. 153) as "Pallas's Herring Gull"; while, to add to the confusion, another species (No. 151) is also called "Siberian Gull," but headed *Larus affinis* Reinh. *L. affinis* is said to be "numerous" at Plover Bay and elsewhere.

The rare and beautiful *Rhodostethia rosea* was taken in October, at Saint Michael's—a young of the year. Mention is also made of Nordenskiöld's Siberian adult of July 1, 1879, and the eight specimens procured by Mr. R. L. Newcomb, Naturalist of the 'Jeannette,' only three of which reached the Smithsonian, with Mr. Nelson's one making the only four specimens at present known to exist in any American collections.

Among the Petrels, the Slender-billed Fulmar, *Priocella tenuirostris* (Aud.) Ridg. (the *Thalassoica glacialoides* of some), is noted as Alaskan on the strength of Dall's Kotzebue Sound record. "A large dark Petrel repeat-

* As described and figured by Cassin in 1855. Illust. B. Cal., etc., p. 272, pl. 45—but whether *leucoparia* of Brandt is another question.

edly seen" on the way south from the Aleutians is supposed to have been *Cymochorea melana* (Bp.) Coues. In the same course, for nearly a thousand miles "scarcely a day passed but a Petrel with the belly white" was seen: this is identified as *Fregetta grallaria*, not impossibly correctly, though the identification of most Petrels on the wing is too difficult to make this case satisfactory.

Colymbus adamsi and *C. pacificus* are both given, as full species, and as occurring besides *C. torquatus* and *C. arcticus*.

Of *Alcidae*, no fewer than fifteen representatives are given, *Synthliborhampus wurmezusume* not included. The most important point in this connection is made in the rediscovery and perfect identification of *Brachyrhampus kittlitzii* of Brandt, long a doubtful bird to American ornithologists, no specimen being known in this country. Mr. Nelson took one in breeding plumage in the spring of 1877, at Ounalaska, and afterward another was secured by Mr. Turner further west in the Aleutian chain. We have had the pleasure of handling Mr. Nelson's specimen, among many other of his birds kindly submitted to our inspection. It is certainly distinct from any Auk known to us when our monograph of the family was prepared, and we have no doubt of the accuracy of the identification which has been made. A colored plate will probably be published in another connection.

What general criticism we might pass upon this notable paper would add nothing to its value, and may be gathered from what has preceded. Obscure as it is upon some points, and much as it lacks of detailed information respecting the nesting and eggs of sundry notable Arctic birds, we cannot be too thankful for what we are here given of novelty, variety, and interest. We should not omit to add that it is illustrated with four colored plates, executed by Mr. Ridgway, representing *Motacilla ocularis*, *Lanius cristatus*, *Eurynorhynchus pygmaeus*, and *Ciceronia pusilla*, all of life size and equally handsome. — E. C.

Cory's Beautiful and Curious Birds.—The recent appearance of Part VII completes the work, which consists of twenty plates, with accompanying text. Ten of the plates relate to as many species of Birds of Paradise; others include the Dodo, the Kiwi (*Apteryx australis*), the Lyre Bird, the Ruff, the Spotted Bower Bird, the Black-headed Plover or Crocodile Bird, and the Sacred Ibis, besides such American species as the Great Auk, the Labrador Duck, and the California Condor. The plates, in part drawn and lithographed by the well-known bird-artist Smidt, are superb illustrations of some of the most striking forms of bird-life. While not, from the nature of the subjects, of high scientific value, it is a work of art and natural history combined, and as such will be welcomed by lovers of birds and fine books. It is dedicated to Mr. J. A. Allen.—W. B.

Stejneger and Ridgway on Birds of the Commander Islands.—In a letter* dated Bering Island, September 30, 1882, addressed to Prof. Baird,

* Contributions to the History of the Commander Islands. No. I. Notes on the Natural History, including Descriptions of New Cetaceans. By Leonhard Stejneger. Proc. U. S. Nat. Mus., 1883, pp. 58-89. July 21, 1883.